### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Confirmation No.: 2752

Kemper et al.

Art Unit: 1616

Appl. No.: 10/598,336

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371 (c) Date: September 25, 2007

Examiner: Brown, Courtney A.

For: Seed Dressing for Soya Bean

## Declaration of Anne Suty-Heinze Under 37 C.F.R. §1.132

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

- I, <u>Anne Sutv-Heinze</u>, of Schlieperstraße 29, 40764 Langenfeld, Germany, a citizen of France, hereby declare:
  - 1. that I am an agrochemist having studied at following academic institutions:
    - Ecole nationale d'ingénieurs des techniques de l'horticulture et du paysage of Angers (France),
    - Institut national polytechnique (INP) of Toulouse (France);
  - that I received the degree of DEA (Diplôme d'études appronfondies) in Agrochemistry at the INP of Toulouse (France);
  - that I entered the employ of Bayer Aktiengesellschaft, Leverkusen, in 1990, where
     I have been employed in the department of Research Biology Fungicides;
  - that after the spin-off of Bayer CropScience AG, I am now an employee of Bayer
     CropScience AG in the department of Research Biology Fungicides;
  - 5. that Bayer CropScience AG is the assignee of the above-captioned application;
  - that I have specialized in the field of phytopathology; and
  - 7. that the following tests have been carried out under my supervision and control.

#### **Biological Tests**

#### Phakopsora pychyrhizi - Greenhouse

The test is performed in the greenhouse. One (1) soybean seed per treatment of the variety Isidor was sown in pots of the size  $7 \times 7 \times 6$  cm<sup>3</sup> containing 3 cm of a mix of steamed field soil and sand (1:1). Three (3) replicates were made. The tested compound was applied using a commercial formulation suitable for seed treatment.

Seed treatment was performed with the aid of laboratory equipment. For untreated, three (3) replicates were made and seeds were treated with water.

Straight compounds were tested at the concentration of 30 g a.i. per 100 kg seed, whereas mixtures were tested both at 30 g a.i. each per 100 kg seed and 10 g a.i. each per 100 kg seed.

Seeds were then covered by 3 cm of the same mix of steamed field soil and sand (1:1). Pots were incubated in the greenhouse 20 days at 24 °C/20 °C (day/night temperature) and 80 % relative humidity.

Plants were then inoculated with a spore suspension of *Phakopsora pachyrhizi* and incubated 24 hours at 100 % relative humidity and 24 °C/20 °C (day/night temperature) in the dark. Plants were then further incubated in the climatic chamber for 7 days at 24° C/20 °C (day/night temperature) and 80 % relative humidity. Assessment consisted of a visual evaluation of diseased surface as well as phytotoxicity.

Based on diseased surface, the degree of efficacy, expressed in % is denoted. 0 % means an efficacy which corresponds to that of the control while an efficacy of 100 % means that no disease is observed.

Phytotoxicity corresponding in reduced emergence or stunting effect is expressed in %.

0 % means an absence of phytotoxic symptoms which plant growth corresponding to that of untreated control while a phytotoxicity of 100 % means absence of seedling emergence.

## Compounds tested

Commercial formulation (active ingredient)	Formulation	Concentration
Jockey F (Fluquinconazole)	FS 167	30 g a.i./100 kg
Twist (Trifloxystrobin)	SC 500	30 g a.i./100 kg
Amistar (Azoxystrobin)	SC 250	30 g a.i./100 kg
Cabrio (Pyraclostrobin)	WG 20	30 g a.i./100 kg
Jockey F (Fluquinconazole) & Twist (Trifloxystrobin)	FS 167 & SC 500	10 + 10 g a.i./100 kg 30 + 30 g a.i./100 kg
Opus (Epoxyconazole) & Cabrio (Pyraclostrobin)	SC 125 & WG 20	10 + 10 g a.i./100 kg 30 + 30 g a.i./100 kg
Jockey F (Fluquinconazole) & Amistar (Azoxystrobin)	FS 167 & SC 250	10 + 10 g a.i./100 kg 30 + 30 g a.i./100 kg
Jockey F (Fluquinconazole) & Cabrio (Pyraclostrobin)	FS 167 & WG 20	10 + 10 g a.i./100 kg 30 + 30 g a.i./100 kg
Jockey F (Fluquinconazole) & Redigo (Prothioconazole)	FS 167 & FS 100	10 + 10 g a.i./100 kg 30 + 30 g a.i./100 kg

# Phakopsora pachyrhizi – Greenhouse efficacy (test results)

Compound	Concentration	Efficacy (%)	Phytotoxicity (%)
Untreated		(92)*	
Jockey F (fluquinconazole)	30 g a.i./100 kg	80	0
Twist (trifloxystrobin)	30 g a.i./100 kg	11	0
Amistar (azoxystrobin)	30 g a.i./100 kg	85	0
Cabrio (pyraclostrobin)	30 g a.i./100 kg	9	0
Opus (epoxyconazole) & Cabrio (pyraclostrobin)	10 g a.i./100 kg & 10 g a.i./100 kg	••	100**
Opus (epoxyconazole) & Cabrio (pyraclostrobin)	30 g a.i./100 kg & 30 g a.i./100 kg	-	100**

Compound	Concentration	Efficacy (%)	Phytotoxicity (%)
Jockey F (fluquinconazole) & Twist (trifloxystrobin)	10 g a.i./100 kg & 10 g a.i./100 kg	91	0
Jockey F (fluquinconazole) & Twist (trifloxystrobin)	30 g a.i./100 kg & 30 g a.i./100 kg	82	0
Jockey F (fluquinconazole) & Amistar (azoxystrobin)	10 g a.i./100 kg & 10 g a.i./100 kg	99	50***
Jockey F (fluquinconazole) & Amistar (azoxystrobin)	30 g a.i./100 kg & 30 g a.i./100 kg	91	0
Jockey F (fluquinconazole) & Cabrio (pyraclostrobin)	10 g a.i./100 kg & 10 g a.i./100 kg	84	0
Jockey F (fluquinconazole) & Cabrio (pyraclostrobin)	30 g a.i./100 kg & 30 g a.i./100 kg	85	0
Jockey F (fluquinconazole) & Redigo (prothioconazole)	10 g a.i./100 kg & 10 g a.i./100 kg	98	25***
Jockey F (fluquinconazole) & Redigo (prothioconazole)	30 g a.i./100 kg & 30 g a.i./100 kg	100	70***

<sup>\*</sup> Infestation

\*\* Reduced emergence

\*\*\* Stunting effect

The undersigned declarant declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at Monheim, Germany,

2010.02.25

Date

Anne Suty-Heinze